

UCRL-JRNL-231040



LAWRENCE  
LIVERMORE  
NATIONAL  
LABORATORY

# Correction to "Sound Velocities of Ferropericlase in the Earth's Lower Mantle"

J. F. Lin, S. D. Jacobsen, W. Sturhahn, J. M. Jackson, J. Zhao, C. S. Yoo

May 18, 2007

Geophysical Research Letters

## **Disclaimer**

---

This document was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor the University of California nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or the University of California, and shall not be used for advertising or product endorsement purposes.

## **Correction to “Sound Velocities of Ferropericlase in the Earth’s Lower Mantle”**

Jung-Fu Lin, Steven D. Jacobsen, Wolfgang Sturhahn, Jennifer M. Jackson, Jiyong Zhao, Choong-Shik Yoo, *Geophys. Res. Lett.*, 33, L22304, doi:10.1029/2006GL028099, 2006.

We regret that a factor of  $(1/2)^{1/3}$  was mistakenly unaccounted for in converting the Debye sound velocities to km/s unit. The correct figure of the derived  $V_p$ ,  $V_s$ , and  $G$  are presented here. The derived  $V_p$ ,  $V_s$ , and  $G$  at ambient conditions are now lower than that of ultrasonic measurements. The difference may arise from the choice of the energy range for deriving the Debye sound velocities, in combination with the energy resolution of the partial phonon density of states in our study. Further analyses to resolve the difference are forthcoming and will be presented elsewhere. Other parts of this Letter, including the discussion, remain unchanged.

This work at LLNL was performed under the auspices of the U.S. DOE by University of California and LLNL under Contract No. W-7405-Eng-48.

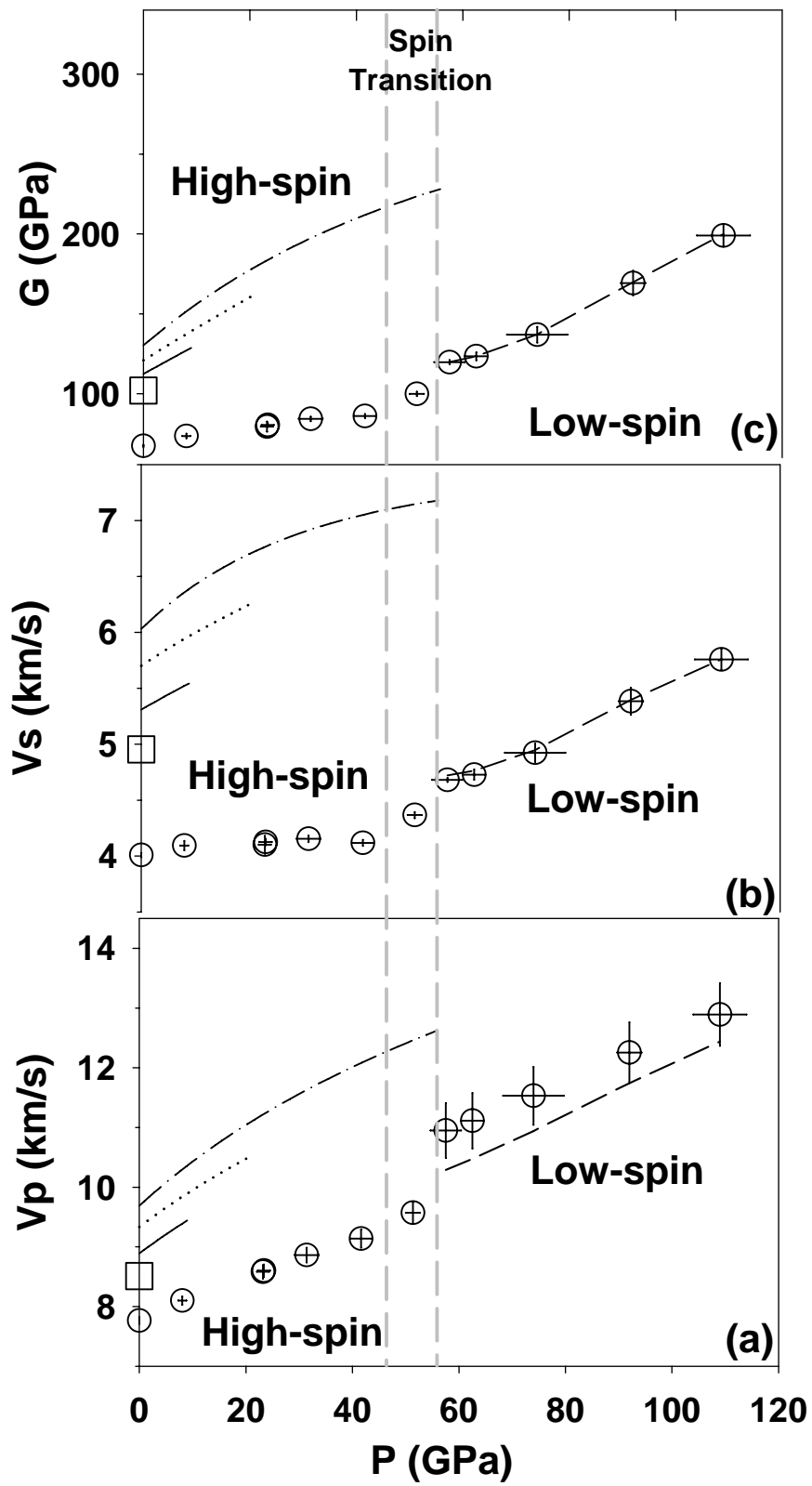


Figure 2